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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,532	07/24/2001	John A. Wheatley	54358USA5J.067	4765

32692 7590 02/26/2003

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EXAMINER

SHAFFER, RICKY D

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,532

Applicant(s)

WHEATLEY ET AL

Examiner

R. D. SHAFFER

Group Art Unit

2872

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 12/10/02
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 30-40 is/are pending in the application.
- Of the above claim(s) 31, 31(32)-31(35) AND 36-40 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 30, 30(32), 30(33), 30(34) AND 30(35) is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☒ The drawing(s) filed on 7/24/01 is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 8
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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1. Applicant's election without traverse of species "B" in Paper No. 14 is acknowledged.
2. Applicant's election with traverse of Group I (claims 30, 30(32), 30(33), 30(34) and 30(35) in Paper No. 14 is acknowledged. The traversal is on the ground(s) that the utility of Group I is not separate from that of Group II. This is not found persuasive because invention I (claim 30) clearly has separate utility such as a multilayer interference film which does not "reflect light polarized in the first plane" (i.e. such as a multilayer interference film which transmits light polarized in the first plane or alternatively does not employ or use any polarized light) and invention II (claims 31 and 36) clearly has separate utility as a reflective film which does not employ "interference" principles (i.e. such as a reflecting film wherein light waves do not interact to produce a cancellation or reinforcement of wave energy) or alternating layers of first and second diverse polymeric materials of invention II (claim 39) which clearly has separate utility as "a multilayer interference film" which does not include a refractive index mismatch in at least a first plane perpendicular to the film or suitable to reflect light over a range of wavelengths.

Applicant argues that the classification of Group II under subclass 500 of class 359 is erroneous but fails to provide any reason(s) why the classification of Group II is not proper for class 359, subclass 483+. The examiner states that the invention of Group II is clearly and properly classified in class 359, subclass 483+ ("Polarization without modulation") and the invention of Group I is clearly and properly classified in class 359, subclass 577+ ("Light Interference").

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Applicant further argues that claims 36-38 are linking claims and should be examined along with the elected invention of Group I based on the language "over a range of wavelength". This is not found persuasive because claims 36-38 are not linking claims but in fact are drawn to a distinct subcombination as stated above. The grouping of claims 36-38 along with the invention of Group II is properly based on "Search and Examination" of those claims, wherein the classification and search required for claims 36-38 would be class 359, subclass 483+ ("Polarization without modulation") based on the claimed language that the reflective film reflects light having a first polarization state, which is not the case for Group I, wherein the classification and search required for claims 30, 30(32), 30(33), 30(34) and 30(35) would be class 359, subclass 577+ ("Light Interference").

The restriction requirement, set forth in Paper No.12, clearly demonstrates the distinctness and burden between each of the patentably distinct inventions. Continued search and examination of claims to a nonelected invention/species including claims having substantially different structural limitations is a Prima Facie showing of burden. Applicant may overcome the requirement for restriction by presenting an allowable linking claim (see M.P.E.P. 809.04) or by providing a clear admission on the record that the claim(s) drawn to a given non-elected invention is not patentably distinct from the elected invention. See M.P.E.P. 803.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 31, 31(32)-31(35) and 36-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention/species, there being no allowable

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generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 14.

4. Claims 30 and 30(32)-30(35) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 30, lines 5-6, the use of the language "a polymer...thereof" is vague and indefinite due to the fact the above language is an improper Markush type grouping. Moreover, the use of the language "copolymer thereof" is vague, indefinite and nonsensical. It is unclear to the examiner how a copolymer of a single polymer (polyethylene naphthalate) can be obtained. Thus, the metes and bounds of the claim is unclear.

Claim 35 is vague, indefinite and fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The third polymeric material lacks proper nexus (the location or placement) with respect to the alternating first and second diverse polymeric layers.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 30, 30(32), 30(33)³⁰⁽³⁴⁾ and 30(35) are rejected under 35 U.S.C. 103(a) as being unpatentable over ^{Rogers ('729) IN VIEW of Utsumi ('953) or Utsumi ('772)}.

To the extent the claims are definite, Rogers discloses a multilayer interference film comprising alternating layers of at least first and second diverse polymeric materials [{(10),(12)} or {(30),(32)}], wherein the alternating layers includes a refractive index mismatch in at least one plane perpendicular to the film and layer thicknesses suitable to reflect light over a range of wavelengths, note figures 1 and 2 and the associated description thereof, except for explicitly stating that one of the first and second diverse polymeric material comprises polyethylene naphthalate.

Utsumi ('953) and Utsumi ('772) each teach it is known to use polyethylene naphthalate layers in place of polyethylene terephthalate layers in same field of endeavor for the purpose of improving the heat resistance, the heat shrinkage ratio, the mechanical properties and the degree of polarization.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to replace the polyethylene terephthalate layers of Rogers with polyethylene naphthalate layers, as taught by Utsumi ('953) or Utsumi ('772), in order to improve the heat resistance, the heat shrinkage ratio, the mechanical properties and the degree of polarization of the multilayer interference film. Note In re Leskin, 125 USPQ 416.

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As to the limitations of claim 30(35), it is well known to use polymeric skin layers of a polycarbonate and/or polymethyl methacrylate materials in the same field of endeavor for the purpose of avoiding instabilities and/or to provide for mechanical strength.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the substrate of multilayer interference film of Rogers ('729) in view of Utsumi ('953) or Utsumi ('772) to include at least one polymeric skin layer of a polycarbonate and/or polymethyl methacrylate material (serving as applicant's third polymeric material different from the first and second diverse polymeric materials), as is commonly used and/or employed in the optical art in order to protect or improve the mechanical strength of the multilayer interference film.

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 30, 30(32), 30(33), 30(34) and 30(35) are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of U.S. Patent No. 5,103,337 to Schrenk et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application (09/911,532) discloses no additional invention or discovery other than what was already claimed and patented in U.S. Patent 5,103,337 or what would have been obvious to one of ordinary skill in the art at the time the invention was made.

9. Claims 30, 30(32), 30(33), 30(34) and 30(35) are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,045,894 to Jonza et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application (09/911,532) discloses no additional invention or discovery other than what was already claimed and patented in U.S. Patent 6,045,894 or what would have been obvious to one of ordinary skill in the art at the time the invention was made.

10. Claims 30, 30(32), 30(33), 30(34) and 30(35) are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13 and 26 of

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U.S. Patent No. 6,368,699 to Gilbert et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application (09/911,532) discloses no additional invention or discovery other than what was already claimed and patented in U.S. Patent 6,368,699 or what would have been obvious to one of ordinary skill in the art at the time the invention was made.

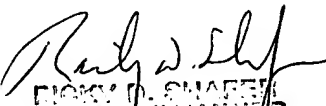
11. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first, second and third layers must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

12. Any inquiry concerning this communication should be directed to R.D. Shafer at telephone number (703) 308-4813.

RDS

February 22, 2003


RICHARD D. SHAFER
PATENT ATTORNEY
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